GYNECOLOGY

UNDER THE CHARGE OF

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Imperforate Hymen Causing Symptoms in a Child.—An interesting and rather unusual case of the occurrence of marked obstructive symptoms, due to imperforate hymen, before the onset of menstruation is reported by WIENER (*Am. Jour. Obst.*, 1917, lxxv, 398). The patient was a girl of twelve, admitted to the hospital complaining of difficult micturition and enlargement of the abdomen. She had had to be catheterized a number of times before coming to hospital. On examination, the hymen was found to be imperforate and bulging; there was a median hypogastric mass reaching up to the umbilicus, fluctuating, but not tender. This mass was not reduced in size on emptying the bladder. The preoperative diagnosis was naturally hematocolpos, but on excising the hymen about 30 ounces of thin, yellowish-white turbid fluid was evacuated. The vagina was enormously dilated, with an infantile uterus at its summit. The origin of the fluid was apparently the glands of the endometrium and cervix, which for some reason had been unduly active.

Relation between the Age of the Ovum and Sex.—During ordinary conditions of life it is practically impossible to determine in any large series of cases the exact date of conception, and therefore to determine at what period in the life-history of the ovum it has become fertilized. In war times, however, this becomes comparatively easy, owing to the fact that soldiers are allowed home on leave for a few days at comparatively long intervals, and the time of fruitful intercourse can therefore in many instances be determined with a fair degree of accuracy. A very interesting series of observations upon this point have been reported by SIEGEL (*München. med. Wchnschr.*, 1916, lxiii, 1787), who thinks there is a very definite relationship between the age of the ovum when fertilization takes place and the sex of the resulting individual, fertilization of young ova resulting in the production of females, of more mature ova in the production of males. If we assume, he says, as has been pretty conclusively demonstrated, that ovulation commonly occurs between the tenth and fifteenth day after the beginning of the preceding menstruation, we may consider the ovum as *young* from about the eleventh to the twenty-third day of the menstrual cycle (counting always from the first day of the period); as maturing from the twenty-fourth to the twenty-sixth day, and as *mature* or "überreif" from the twenty-sixth to the ninth day. In a tabulated series of 115 cases in which time the conception could be determined, Siegel found that of conceptions occurring from the twenty-seventh to the ninth day of the menstrual cycle, *i. e.*, resulting in the fertilization of a mature ovum, there were born fifty-two boys and eight girls; of conceptions occurring from the tenth to the fourteenth day, resulting in the fertiliza-

tinn of the young ovum of that cycle or of the mature one of the preceding cycle, there were born ten boys and fourteen girls; of conceptions occurring from the fifteenth to the twenty-third day, resulting in the fertilization of young ova, there were born five boys and twenty-six girls. In other words, conception occurring with mature ova resulted in 86 per cent. of boys; with young ova in 84 per cent. of girls, and those occurring at the intermediate period in about an equal division of the sexes. A smaller series of 25 cases, observed by another author and quoted by Siegel, give practically parallel results. These findings are quite in accord, says the author, with facts demonstrated by animal experiments, and well known to breeders of dogs and cattle, who make use of them in the development of their stock.

Chronic Urethral Gonorrhea in the Female.—The great importance of this condition, and the fact that it is frequently overlooked or regarded too lightly, is emphasized in a recent article by Bizard and Blum (*Presse méd.*, 1917, p. 46). They point out that it affects chiefly young girls and nulliparæ, infection of the cervix being more common in parous women. It exists in two chief forms: Primary ("l'urétrite chronique d'emblée"): This is not very rare; it manifests itself as a pure urethritis, without other localization of gonococci. It is absolutely symptomless, producing no pain, burning, or abnormal sensation, but a drop of thick pus containing masses of gonococci can be expressed from the urethra. Unless a drop of this pus happens to be present at the meatus at the time of examination, however, the only visible evidence of the condition will be a slight puffiness of the tissues. The course of the affection is protracted; it remains torpid, the gonococcus is very tenacious, and treatment is apt to be required for weeks or months. Secondary: This is even more frequent than the primary form; it is found in women cured of a primary vulvovaginal gonorrhea. It manifests itself as a very slight urethral discharge, coming on two or three months after other condition, and rarely sufficient in amount to stain the clothing. Occasionally this form is painful; and sometimes the discharge is sufficiently profuse to be troublesome to the patient. The characteristic sign is, again, the drop of pus, often secured by the physician only after considerable trouble. The patient must be examined before micturition, and often early in the morning, before the first micturition of the day. In cases where the condition is very chronic, and the deeper portion of the urethra is affected, vigorous and prolonged massage of the latter, starting at its inner extremity and pressing it vigorously up against the pubis, is necessary to bring a drop of pus to the meatus. It may even be necessary to scrape out some epithelial elements from the urethra by means of the platinum loop in order to get material for study. The treatment of urethral gonorrhea in women must be persisted in for a long time, and must be mild. It consists in three chief methods: massage, lavage, and applications. Massage is to be done gently, with the finger inserted deeply into the vagina, always from behind forward, care being taken not to injure the urethra against the pubis. Lavage may be done either with or without a catheter, using potassium permanganate 2.5 per cent., oxycyanide of mercury 1 to 1000, or copper sulphate 2 to 1000. Applications must be made every day, but very gently and cautiously. The

mucosa should never be made to bleed, and the treatment should cause no pain after the patient has become accustomed to it. An oily fluid is used such as pure ichthyol or gomenol, applied with a cotton-tipped applicator. After apparently cured, the patient should be reëxamined at regular intervals to detect any possible recurrence.

OTOLOGY

UNDER THE CHARGE OF

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War-deafness.—LERMOYEZ (*Monde méd.*, January 17, 1917) in this paper limits his observation to the impairment of hearing due to direct and indirect trauma, the former including immediate injuries to the temporal bone and the latter being limited to the effect of concussive shock upon the perceptive apparatus. Immediate trauma is that which is inflicted directly upon the temporal bone, mediate trauma is an injury to the auditory apparatus consequent upon a damage to the cranium and includes the effect of contusions and blows upon the head, a considerable decrease in hearing or complete deafness, resulting with, or without, fracture of the skull. Under the eventualities of modern war conditions in immediate trauma there is usually the penetration of projectiles or bullets or pieces of shell into the temporal bone and these, so far as procedure is concerned, may be divided into two classes, those in which the projectile is visible at the fundus of the external auditory canal permitting immediate removal, and those in which the penetration is deeper with invasion of the petrous portion of the temporal bone or beyond, in which surgical intervention may be made to follow upon the sequence localizing events, surgical intervention following the evidence of a suppurative discharge from the ear, facial paralysis, labyrinthine or meningeal phenomena. In transverse fracture of the petrous portion of the temporal bone, in the great majority of cases, the lesion is perpendicular to the axis of the bone extending from the posterior to the anterior foramen, involving the vestibule and cochlea, but sparing the middle ear; the organ of Corti is usually destroyed and the auditory and facial nerves may be lacerated or divided and there is, usually, a free persistent discharge of cerebrospinal fluid with concomitant signs of fracture of the skull. The impairment of hearing is usually unilateral, and on the recovery of consciousness after the injury there is usually high-pitched tinitis in the affected ear, dizziness, nausea and static disturbance, the latter symptom being sometimes reliable by lumbar puncture. In the longitudinal injury of the temporal bone the temporal parietal region is especially involved and the line of fracture usually runs parallel to the axis of the petrous bone, opening the tympanic cavity, but not necessarily involving the internal ear except as the result of concussion,